

CAN-UDP

Datasheet

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Foreword

Notational Conventions

The following categorized signal words with defined meaning might appear in the manual.







Signal Words	Meaning
 DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
 CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
 ANTISTATIC	Indicates static sensitive equipment.
 DANGER! ELECTRIC SHOCK	Indicates High voltage danger.
 TIPS	Provides methods to help you solve a problem or save you time.
 NOTE	Provides additional information as the emphasis and supplement to the text.

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1 Overview

1.1 Introduction

The Yacer CAN-UDP micro embedded communication module provides one CAN bus interface, 100M Ethernet PHY interface, and one UART extended interface. Realize the protocol conversion between CAN, Ethernet and serial port.

30 x 35 mm small size, 2.0 mm pin connector. + 3.3V power supply, low power consumption. Industrial wide temperature, suitable for embedded applications.



1.2 Features

- One CAN bus interface;
- One 10/100M Ethernet PHY;
- One UART extended serial port;
- + 3.3V power supply, Low power consumption;
- Small size, Industrial wide temperature.

1.3 Applications

- Conversion between CAN and Ethernet;
- Conversion between CAN and UART serial port;
- Embedded application and development.

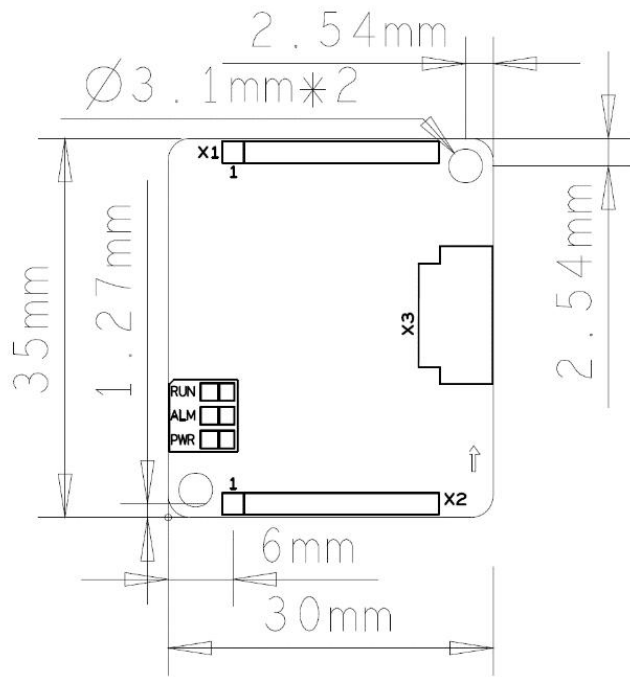
1.4 Order Information

Model	CAN bus interface	Ethernet interface	Extended interface
CAN-UDP-200	1 x CAN	1 x 10/100M PHY	1 x UART

1.5 Technical Specifications

Item	Parameters	Details
CAN Interface	Level standard	3.3V LVCMOS
	Working Mode	CAN 2.0A, CAN2.0B, ISO 11898
	Baud rate	≤ 1 Mbps
Ethernet Interface	Number	1 x 100M PHY
	Rate	100M Full-duplex
	Protocol	UDP
UART Interface	Level standard	3.3V LVCMOS
	Duplex mode	Full-duplex, Half-duplex
	Baud rate	≤ 921.6 Kbps
Power Requirements	Input voltage	+3.3 VDC
	Power consumption	< 1 W
Mechanical Characteristics	Connector	2.0 mm pin connector
	Dimensions	30 mm x 35 mm
	Weight	< 15g
Operating Environment	Operating temperature	-40 ~ +85°C
	Storage temperature	-40 ~ +85°C
	Operating humidity	5 ~ 95% RH (no condensation)

1.6 Mechanical Dimension Drawing

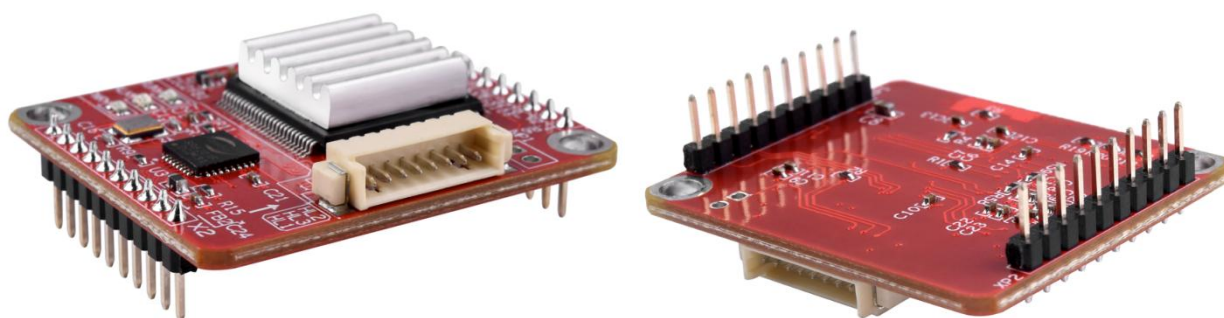


2 Hardware and Physical Interface

2.1 Appearance

The positive and negative sides of the module are as follows, and the signal is drawn through pin X1, X2.

X3 is the configuration interface, connect the DMS-UART-8P configuration cable, and configure online through the management computer's USB interface.



2.2 LED Indicators

LED	Description
RUN	Running indicator, green light flashes during normal operation
ALM	Alarm indicator <ul style="list-style-type: none"> Initialization phase blinking: waiting for the host computer configuration command Normal operation status off: the device is working normally Normal operation status on: device failure
PWR	Power indicator, always on after power on

2.3 X1: 1x10 2.0mm pitch connector

Pin	Signal	Direction	Description
1	VCC3V3	I	Power input, +3.3 VDC
2	RESET_IN	I	Module reset input, active low. Module has POR function, pins can be suspended
3	NC		Standby, must be left suspended
4	UART_TxD	O	Serial data transmit
5	UART_RxD	I	Serial data receive
6	UART_TX_EN	O	Serial port transmit enable, enable level is high,

Pin	Signal	Direction	Description
			for half duplex
7	AUX_UART_TxD	O	Standby serial data transmit
8	AUX_UART_RxD	I	Standby serial data receive
9	AUX_UART_TX_EN	O	Standby serial port transmit enable, enable level is high, for half duplex
10	GND		Signal ground

2.4 X2: 1x10 2.0mm pitch connector

Pin	Signal	Direction	Description
1	GND		Signal ground
2	CAN_RX	I	Optional CAN interface data receive
3	CAN_TX	O	Optional CAN interface data transmit
4	NC		Standby, must be left suspended
5	ETH_LED	O	Ethernet Link/Act indication, drive LED positive
6	ETH_TX+		Ethernet PHY interface Tx+, external network transformer required
7	ETH_TX-		Ethernet PHY interface Tx-, external network transformer required
8	ETH_RX+		Ethernet PHY interface Rx+, external network transformer required
9	ETH_RX-		Ethernet PHY interface Rx-, external network transformer required
10	GND		Signal ground

About the Manual

- The manual is for reference only. If there is inconsistency between the manual and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the manual.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the manual. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- Please visit our website, contact the supplier or customer service if there is any problem occurring when using the device.
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